

BOARD PERSPECTIVES

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A Director's Road Map for Effective AI Implementation

Almost every organisation around the world is trying to figure out what AI offers and how to deploy it to move the business forward. A road map can help directors engage more effectively in these strategic conversations.

We are entering a new frontier in which transformative artificial intelligence (AI) technologies are expected to significantly impact many sectors as well as society itself. Directors have a duty of care and duty of loyalty to engage in strategic discussions with management about aligning AI deployments with business strategy and proliferating regulatory requirements. The purpose of these conversations is to ensure responsible deployment, maximise return on investment (ROI) and reduce risk to an acceptable level.

Our point of view is that an end-to-end understanding of the AI implementation process provides a context for directors to participate confidently in these discussions by asking the appropriate questions at different phases along that process as the organisation progresses with its AI initiatives. Given the importance of including responsible AI deployment on the boardroom agenda, this issue of *Board Perspectives* is intended to assist directors in their board service.

Thousands of Protiviti conversations with clients and hundreds of workshops and solutioning sessions regarding the complexities in and future of the marketplace have identified common questions being asked by many companies, notably:

- What constitutes “AI,” and what does it mean for our business?
- How can we determine the best use cases for applying it?
- How can we have confidence in the solutions we identify and their outputs?
- How do we stay abreast of the rapidly changing environment, both from a legal and regulatory standpoint, and from developments in the technology itself?

Often, client discussions attempt to address three objectives:

1. Identify how to maximise the value contributed by AI.
2. Strike the appropriate balance between AI innovation and risk management through multidisciplinary, cross-functional teams.
3. Make informed capital deployment decisions on where to begin and how to move forward responsibly with AI.

Leading adopters involving more than 2,000 C-suite leaders responsible for bringing AI transformation to life at their organisations report an average ROI of 350%.

Early Returns Are Promising, but Much Remains to Be Done

These high-stakes discussions are important. They have profound consequences, as illustrated by the early returns:

- A global study of leading adopters involving more than 2,000 C-suite leaders responsible for bringing AI transformation to life at their organisations reports an average ROI of 350%, with 5% of the participants reporting an average of 800%.¹
- Another global study of 4,500 senior leaders found that 92% of workers believe AI is having a positive impact, with 26% referring to it as a “miracle.” The top productivity gains of AI include saving time (67%), speeding up work (61%), and reducing or eliminating repetitive work (45%). Four in 10 workers (41%) report that “AI has completely changed how I work for the better.”²

¹ “The Business Opportunity of AI,” by Ritu Jyoti and David Schubmehl, IDC, November 2023: <https://idcdocserv.com/US51315823-IG-ADA>.

² “Future of Digital Work Enterprise insights: Productivity is a shared responsibility rooted in tech,” Adobe Document Cloud Team, July 27, 2023: <https://blog.adobe.com/en/publish/2023/07/27/future-digital-work-enterprise-insights-productivity-shared-responsibility-rooted-in-tech>.

- The impact of generative AI (GenAI) is far-reaching. One global study conducted in collaboration with Oxford Economics noted that 62% of executives say this technology will disrupt how their organisations design customer and employee experiences.³ Still another global study of 10,000 desk workers found that 81% of employees using AI claim these tools increased their productivity and the quality of their work; furthermore, employees using AI were more engaged in their work.⁴

Perhaps one of the most misinterpreted aspects of GenAI is how early we are in adoption at scale. Although many organisations have experimented with the technology in at least one business function or are piloting it, research⁵ indicates just 11% of companies have adopted it at scale.

Meanwhile, two other research reports⁶ assert that only 3% of 150 large North American and European companies have scaled GenAI in an operations-related domain, with more than 250 service operations faring only slightly better. Thus, much remains to be done. And despite the oft-told risks, few want to be left behind.

Types of AI

As a context, there are three primary “types” of AI that could be viewed as AI capability stages:⁷

- Artificial narrow intelligence (ANI) uses algorithms, rules, parameters and contexts to perform and automate specific tasks that replicate human capabilities. Chatbots, recommendation engines, predictive analytics and facial recognition as part of security systems are examples. ANI systems – which include machine learning (ML), natural language processing and computer vision – enable product and service innovations, automation of routine tasks, improved safety, decision-making support, more targeted maintenance, and faster responses to customer inquiries.
- Artificial general intelligence (AGI) is a more advanced form of AI. A field of theoretical research intended to create software that can perform intellectual tasks in a manner similar to human beings, AGI is intended to be capable of learning, reasoning and adapting to new situations.
- Artificial superintelligence (ASI) is a hypothetical capability that surpasses human intelligence with the potential to solve problems beyond the capabilities of humans. For instance, an ASI system could potentially design highly efficient energy systems or develop new medical treatments. The stuff of science fiction, ASI remains a topic of debate and speculation.

³ “Value increases when technology meets design. Value explodes when generative AI meets experience,” IBM Institute for Business Value, August 29, 2023: www.ibm.com/thought-leadership/institute-business-value/en-us/report/ceo-generative-ai/employee-customer-experience.

⁴ “81% of workers using AI are more productive. Here’s how to implement it,” by Vala Afshar, ZDNET, June 20, 2024: www.zdnet.com/article/81-of-workers-using-ai-are-more-productive-heres-how-to-implement-it/.

⁵ “Moving past gen AI’s honeymoon phase: Seven hard truths for CIOs to get from pilot to scale,” by Aamer Baig, Douglas Merrill, Megha Sinha, Danesha Mead and Stephen Xu, McKinsey, May 13, 2024: www.mckinsey.com/capabilities/mckinsey-digital/our-insights/moving-past-gen-ais-honeymoon-phase-seven-hard-truths-for-cios-to-get-from-pilot-to-scale.

⁶ “From promising to productive: Real results from gen AI in services,” by Jorge Amar and Oana Cheta, McKinsey, August 16, 2024: <https://www.mckinsey.com/capabilities/operations/our-insights/from-promising-to-productive-real-results-from-gen-ai-in-services>.

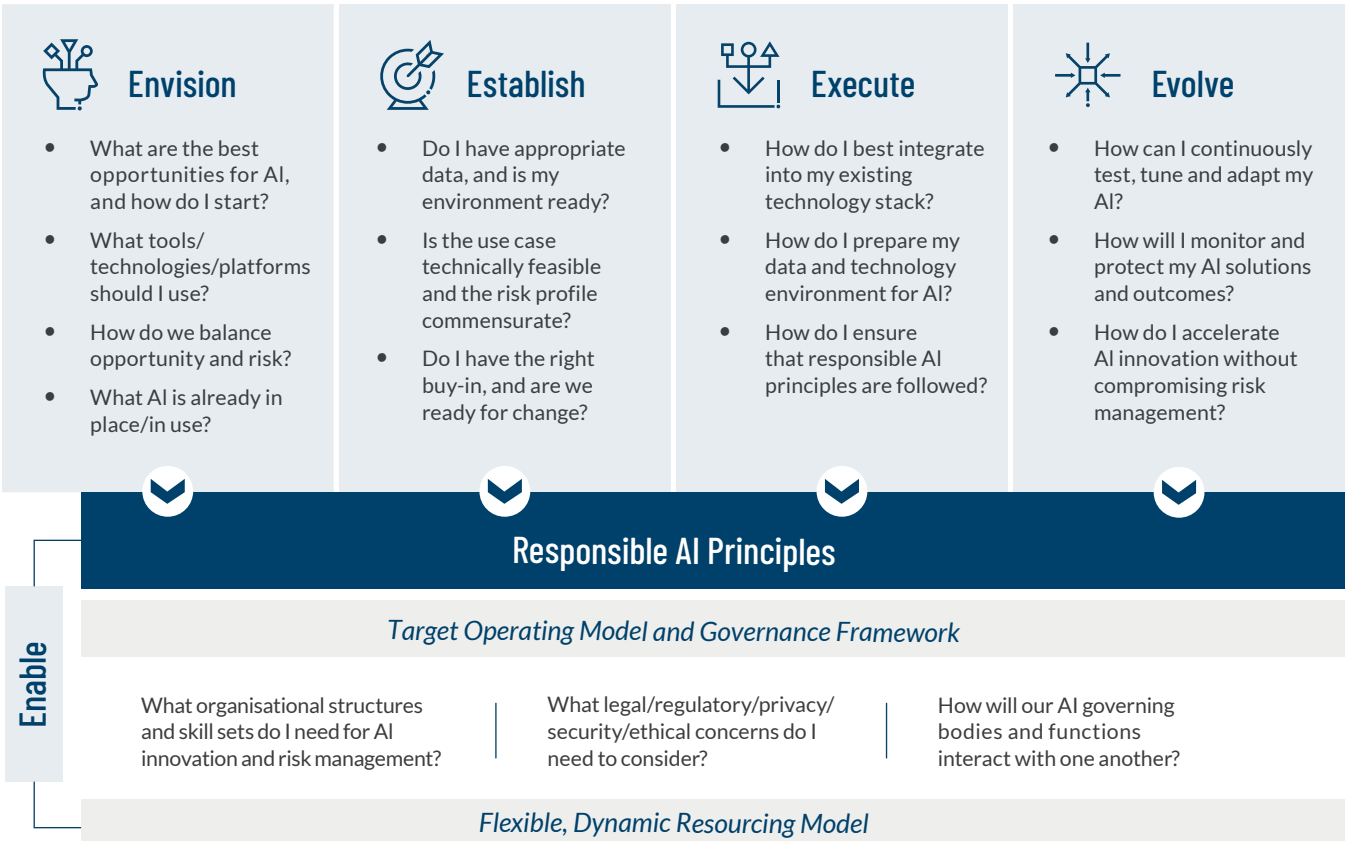
⁷ “What is artificial general intelligence (AGI)?” Google Cloud “Topics”: <https://cloud.google.com/discover/what-is-artificial-general-intelligence>.

At this time, the enterprise market is at the ANI stage, with some applications and models starting to come closer to AGI. GenAI systems⁸ offer a creative force that makes possible shortcuts in accessing and organising data and information in imaginative ways. A capability that may eventually fit into any of the above categories of AI as a subset, GenAI models offer limitless opportunities for revolutionising processes or domains involving creation and innovation, thereby improving quality, increasing efficiencies and compressing elapsed time, as well as training, developing and supporting people.

Approaching AI in a Structured, Responsible Manner

As AI inspires conversations on reimagining how businesses operate, transforming business functions and increasing competitive advantage, it simultaneously creates new sources of risk related to data privacy, cybersecurity, ethical considerations and workforce challenges. Thus, the stakes are high for directors. Visibility into an end-to-end implementation road map can facilitate focused discussions on AI opportunities and challenges.

The road map below illustrates questions leading companies are asking as they approach AI strategically in a responsible manner. The road map is constructed in four phases – **envision**, **establish**, **execute** and **evolve** – all **enabled** by responsible AI principles and a target operating model that addresses the delicate tension between risk and innovation.



⁸ "The Director's Playbook for Generative AI," *Board Perspectives*, Issue 167, by Christine Livingston, Protiviti, August 2023: www.protiviti.com/us-en/newsletter/bp167-generative-ai.

Each phase of the road map is discussed further below:

Envision what AI can contribute to the business and explore the tools and technologies to consider given the opportunities, potential risks and available skill sets. Once the best opportunities for implementing AI are defined, **Envision** also entails prioritising use cases, determining necessary AI technical components and outlining the target architecture needed to implement the selected use cases. The selection of the use cases deployed considers their potential benefits, challenges and unintended consequences.

Establish the environment, data, talent and approach needed to operationalise the selected AI applications. The datasets supporting each use case should be evaluated for reliability, relevancy, currency, accessibility and completeness. Datasets must comply with privacy regulations, meet sensitive data-handling requirements and adhere to anti-discrimination laws to help ensure ethical and lawful use. Proven methodologies should be applied to accelerate ideation to functional prototype to demonstrate the feasibility and risk profile of AI use cases. Buy-in and change readiness should be obtained by identifying the individuals most affected, building trust among key stakeholders and educating users on expected outcomes.

Execute the deployment of responsible AI solutions, leveraging a combination of buy, borrow and build technology acquisition strategies. Solutions should be executed iteratively, their results evaluated, the underlying data and model algorithms improved and, once desired performance levels are attained, integrated into the business. Data protection laws and industry regulations should be considered so that appropriate ethical requirements and principles of fairness, transparency, accountability, auditability and security are addressed effectively.

Evolve deployed AI solutions by scaling, securing and monitoring post-deployment as solutions are both developed internally and taken to market. In deploying high-risk AI capabilities at scale, testing is needed to identify flaws and vulnerabilities. When harmful or discriminatory outputs, unwanted system behaviours, misinformation or disinformation, or other dysfunctions are noted, the AI system should be rolled back while it is refined. Mechanisms should be in place for continuous monitoring and feedback collection from users and stakeholders. Model performance metrics and real-time alerts should be used to evaluate the use case performance and facilitate human oversight over time.

It is our experience that companies that experimented with “early” AI are way ahead of their “wait and see” competitors in terms of maturity of thinking and skill sets to execute. In this innovative environment, lessons learned are often proprietary and, therefore, unshared.

Enable responsible AI by developing a target operating model and governance framework. Responsible AI principles are realised through AI governance, security and risk management, and preparations for and compliance with applicable laws, regulations and ethical guidelines. These necessary guardrails are not intended to slow the adoption and implementation of AI technologies, but rather to accelerate and optimise their responsible deployment throughout the enterprise. The availability of appropriate skill sets also greatly impacts an organisation's success in implementing AI solutions.

In summary, AI technologies offer transformative possibilities for many organisations across all sectors. It is a strategic imperative for companies to embrace their potential if they intend to remain relevant and competitive. That is why many companies are choosing to ride the inevitable wave of AI-enabled innovation before it crests. Furthermore, it is our experience that companies that experimented with “early” AI are way ahead of their “wait and see” competitors in terms of maturity of thinking and skill sets to execute. In this innovative environment, lessons learned are often proprietary and, therefore, unshared.

A Board Imperative


The above road map offers a high-level strategic perspective into the process for envisioning, establishing, executing, evolving and enabling AI and the nature of the questions to ask during each phase to ensure responsible implementations. AI deployment is sparking a change in thinking regarding the redesign of workflows, routine tasks, analytical processes and data processing. Its inclusion on the boardroom agenda is crucial due to its potential in driving analytical insights and enhancing operational efficiency, decision support and customer service.

The board's challenge is positioning itself to advise the CEO and management team. The above discussion offers a contextual framework for directors as high-impact use cases are identified, opportunities and risks are evaluated, appropriate policies are established, and performance is monitored over time. Interestingly, a review of S&P 500 companies⁹ discloses that only 13% have at least one director with AI-related expertise. Furthermore, only about 15% of these companies provide some disclosure in proxy statements about board oversight of AI. The prominence of AI in transforming business processes may spark increased investor interest regarding the board's focus on the company's AI deployments. Thus, increased enterprise investments and AI's scaled use by employees merits the board's attention.

⁹ “AI Governance Appears on Corporate Radar,” *ISS Insights*, March 25, 2024: <https://insights.issgovernance.com/posts/ai-governance-appears-on-corporate-radar/>.

To begin the dialogue, following are suggested starter questions directors can use to initiate a strategic discussion with management on responsible AI deployment:

- Do we have sufficient AI expertise in the boardroom? As a board, how can we become more knowledgeable about AI and its impact on our business?
- Have we thought about where we should apply AI and what our strategy is in deploying it? If so, how have we prioritised AI technology investments in a manner that supports our competitive strategy?
- Do we fully understand the requirements of the regulatory frameworks that apply to the development and use of AI? To that end, are we giving appropriate recognition to security?
- Do we have confidence in how we are using AI, including the manner in which we are addressing and mitigating the risks unique to AI? For example, how are we ensuring that intellectual property and sensitive or proprietary data remain secure during the deployment of AI technologies?
- Are we monitoring the AI-related legal and regulatory developments in all jurisdictions in which we do business? Is the ethical framework we are using in deploying AI responsibly consistent with our brand image?
- Do we have the talent we need to unlock the value of AI? How are we upskilling or reskilling our workforce to ensure that we achieve our ROI expectations?
- Is there an advisory board (or its equivalent) that guides and promotes the adoption of AI in the business (i.e., defines the why, where, how and when AI is deployed in the organisation) and provides effective oversight of responsible deployment?



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How Protiviti Can Help

AI is changing the way we do business. Across all industries, from technology to healthcare, financial services and consumer products, organisations are adopting AI, intelligent automation and advanced analytics to improve processes, drive new business opportunities and increase competitive advantage.

We've helped boards and senior executives in each element of the framework discussed in this issue of *Board Perspectives*. This includes but is not limited to running board education sessions, leading facilitation and design thinking sessions to prioritise opportunities to use AI, reviewing and advising on AI governance and policies, and assisting with implementing data-driven solutions that improve customer experiences and increase operational efficiency, speed and reliability as well as managing third-party risk and compliance requirements.

About the Author



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Christine is responsible for Protiviti's AI/ML capabilities and solutions. With over a decade of experience in AI/ML deployment, she has delivered hundreds of successful solutions, including many first-in-class AI-enabled applications. She has helped several *Fortune* 500 clients develop practical strategies for value-driven enterprise adoption of artificial intelligence, including the creation of capability-based AI-enabled technology road maps. She focuses on identifying emerging technology opportunities, incorporating AI/ML capabilities into enterprise solutions, and delivering tangible business value and outcomes through AI.

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